



# Florida Fruit Tree Pilot Crop Insurance Program

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Training Module  
2007 Crop Year



# Objectives

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- Review the revised Florida Fruit Tree (FFT) Crop Provisions, including the
  - Occurrence Loss Option (OLO)
- Review the Comprehensive Tree Value Endorsement (CTVE)
- Provide examples of
  - Determining the Amount of Protection and premium
  - Claim settlement for the FFT (base) policy, base policy with the OLO, CTVE, and CTVE with the OLO



# 2007 Crop Year Revisions

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- Single policy to cover tropical and citrus trees
- Insurance Period: July 1 through May 31 for 2007; June 1 to May 31 for 2008 and subsequent years
- ACC language clarification
- Additional cause of loss:
  - Flooding due to high groundwater levels (Miami-Dade County only)
  - Freeze coverage for young trees north of I-4
- Revised tree stage definitions
- Revised method of unit stage determination
- New damage appraisal method – Limb Diameter
- Percent damage determined only within stand of damaged trees
- Revised prices and rates
- OLO – modified indemnity calculation
- CTVE - additional amount of protection



# FFT Crop Provisions

## Section 1. Definitions

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- Amount of Protection (unit): The dollar amount for the unit calculated by multiplying the number of insurable trees reported by you in each stage-block times the applicable tree reference price for the stage, totaling these values, and then multiplying this result times the coverage level selected by you.
- Buckhorn: To prune any limb at a diameter of at least three inches for citrus and carambola trees; at least four inches for avocado and mango trees.



# Section 1. Definitions continued

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- Crop: Each of the following:
  - Avocado trees;
  - Carambola trees;
  - Grapefruit trees;
  - Lemon trees;
  - Lime trees;
  - Mango trees;
  - Orange trees (early/mid-season, late, Navel, and Temple oranges);
  - Other citrus trees: Tangerines, tangelos, and Murcotts; and
  - Any other trees as grouped and specified in the Special Provisions.



## Section 1. Definitions continued

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- Crop year: For the 2007 crop year only, the period beginning July 1 and extending through May 31 of the following year, and for the 2008 crop year and succeeding years, the period beginning June 1 and extending through May 31 of the following year, and is designated by the calendar year in which the period ends.
- Excess moisture: Direct or proximate rainfall in quantities sufficient to destroy the tree.
- Sales closing date: In lieu of the definition in section 1 of the Basic Provisions, there is no specific date by which applications must be filed. However, applications submitted after the sales closing date may affect your eligibility for other farm program benefits. The sales closing date is the last date you may change the coverage level, optional coverage, or amount of protection for the next crop year.



## Section 1. Definitions continued

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- Stage: A tree-classification system used by us. At the time insurance attaches, the stage of each insurable tree in the unit is:
  - For orange, grapefruit, lemon, lime, other citrus, avocado, and mango trees, if they:
    - Were set out less than three crop years, buckhorned or topworked less than two crop years, or were reset after having been toppled less than one crop year prior to the beginning of the current crop year, denoted as stage I.
    - Were set out three or more crop years, buckhorned or topworked two crop years or more, or were reset after having been toppled less than two crop years prior to the beginning of the current crop year, but do not yet qualify as stage III denoted as stage II.



## Section 1. Definitions continued

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Stage, *continued*: Are able to produce a yield typical of a healthy tree of the current tree age, denoted as stage III, except that:

- Citrus, avocado, and mango trees will not qualify for stage III until after the sixth crop year after set out; and
- Citrus, avocado, and mango trees will not qualify for stage III until after the fourth crop year after buckhorning or topworking.





## Section 1. Definitions continued

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- Stage, continued:
  - For carambola trees, if they:
    - Were set out, buckhorned, or topworked less than one crop year prior to the beginning of the current crop year, denoted as stage I.
    - Were set out, buckhorned, or topworked one or more crop years prior to the beginning of the current crop year, but do not yet qualify as stage III, denoted as stage II.
    - Are able to produce a yield typical of a healthy tree of the current tree age, denoted as stage III; however, carambola trees will not qualify for stage III until after the second crop year after set out, buckhorning, or topworking.



## Section 1. Definitions continued

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- Share: In lieu of the definition in section 1 of the Basic Provisions, your percentage of interest in the insured crop as owner, or tenant with a long-term lease of not less than 6 years beyond the current crop year covering the acres that the insured trees are planted on, at the time insurance attaches. However, only for the purpose of determining the amount of indemnity, your share will not exceed your share at the time of loss.
- Toppled: A tree that is no longer upright and has an exposed root system.



## Section 1. Definitions continued

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- Unit Value: Unless otherwise specified on the actuarial documents, the amount determined by multiplying the actual number of insurable trees in each stage-block in the unit, as determined by us, on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times the applicable tree reference price for the stage listed in the actuarial documents, totaling these values, and then multiplying this result times the coverage level selected by you.



## Section 1. Definitions continued

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- ACC Underwriting Certificate: A form issued by APHIS or DPI, which describes the status of citrus trees with respect to ACC.
- Acceptable, negative ACC Underwriting Certificate: An ACC Underwriting Certificate issued by DPI no more than one month before the date that it was received by us, is based on inspections performed within the time periods required by DPI or APHIS, and which indicates that the citrus trees in the section are not infected by or exposed to ACC.
- Amount of Insured Damage: The dollar amount determined by multiplying the damage value by the coverage level.



## Section 1. Definitions continued

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- Block: A stand of trees of the same crop on acreage sharing a common boundary with no discernable change in the planting pattern.
- Damaged value: The dollar amount determined by multiplying the actual number of insurable trees in each stage-block damaged by the most recent cause of loss times the applicable tree reference price, multiplying this result for each stage-block times the percent of damage applicable to each stage-block, and totaling these values.



# Section 1. Definitions continued

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- Destroyed tree: A tree damaged to the extent that:
  - DPI identified as being infected by or exposed to ACC and you removed according to the limitations specified in the Special Provisions;
  - The tree is dead;
  - For citrus only, if there exists damage within one foot of the trunk for stage II and stage III trees;
  - For carambola only, if there exists damage within six inches of the trunk for stage I or II trees, or within one foot of the trunk for stage III trees;
  - The tree is toppled, and rehabilitation is not possible, or the tree is missing; or
  - There is no live wood above the bud union.
- Fully damaged tree: A tree that is 100-percent damaged and requires rehabilitation, but is not destroyed. The percent of damage is determined in accordance with section 12(b).
- Partially damaged tree: A tree that requires rehabilitation but for which the extent of damage is less than 100 percent. The percent of damage is determined in accordance with section 12(b).



## Section 1. Definitions continued

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- Occurrence Loss Option: An option that may be elected by you that eliminates the unit deductible in accordance with section 14.
- Rehabilitation: The pruning of limbs at a diameter of at least one inch for citrus and carambola, and at least two inches for avocado and mango, in an attempt to remove the damaged areas and allow the tree to recover.
- Stage-block: A block in which at least 75 percent of the trees are the same stage.



## Section 1. Definitions continued

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- Stand of damaged trees: The area or areas within a unit where damage due to the same insurable cause of loss occurs, as established by us for the crop year, and used to determine the damage value for the unit. If distinct areas of damaged trees within the unit cannot be established, the stand of damaged trees will be the entire unit.
- Tree reference price: The price per tree listed on the actuarial documents for tree replacement or rehabilitation that is used in calculating the unit value, the amount of protection, and the damage value.





## Section 1. Definitions continued

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- Tropical trees: Avocado, carambola, and mango trees.
- Undamaged tree: A tree that does not require rehabilitation or removal.
- Underreport Factor (unit): The result of dividing the amount of protection by the unit value, rounded to three decimal places, not to exceed 1.000.
- Unit Deductible: The dollar amount determined by multiplying the actual number of insurable trees in each stage-block in the unit on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times the applicable tree reference price, totaling these values, and multiplying this result times the deductible.



## Section 2. Unit Division

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- (a) A basic unit, as established in section 1 of the Basic Provisions, will be divided into additional basic units by each crop defined in section 1 of these Crop Provisions.



## Section 3. Insurance Guarantees, Coverage Levels,...

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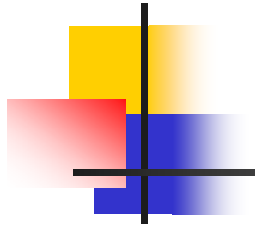
- (b) After the initial crop year of insurance, your coverage level election, share insured, optional coverage or amount of protection may only be changed on or before the sales closing date prior to the beginning of the crop year for which the change is to be effective, except as provided in section 3(c)



## Section 3. Insurance Guarantees, Coverage Levels,...

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- If an ACC Underwriting Certificate indicates that some citrus trees in any section are infected by or exposed to ACC and ACC coverage has attached, then the coverage level for the crop and share insured cannot be increased, optional coverage cannot be added, and any sections of added land in a section that contains trees infected by or exposed to ACC cannot be insured for losses caused by ACC, until the following crop year and:
  - (1) The trees specified as infected by or exposed to ACC are removed;
  - (2) You provide documentation of tree removal, obtained from DPI or APHIS, to us;
  - (3) You submit an acceptable, negative Underwriting Certificate to us; and
  - (4) Other conditions for insurability are met.



## Sections 4 and 5.

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- Contract Change Date
  - The contract change date is **January 31** preceding the cancellation date.
- Cancellation and Termination Dates
  - The cancellation and termination dates are **May 31** before the beginning of the crop year.



## Section 6. Report of Acreage

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- Must submit an annual acreage report on our form by the sales closing date of the calendar year in which insurance attaches for carryover insureds and the date of application for new insureds.
- Must report by stage-block for each unit:
  - The stage of the trees
  - The number of trees (insurable and non-insurable)
  - The number of trees not insured for ACC losses
- Must submit a pre-acceptance worksheet and grove identification map, which indicates the location of each stage-block of trees by section and includes any trees not insurable or not insured for losses caused by ACC, for each unit with your application. A revised worksheet and map must be submitted by the acreage reporting date if any trees are added in a succeeding crop year.



# Stage-block Determination, Example

- For blocks in which **less than 75%** of the trees are the same stage, the producer **must** separate the blocks into stage-blocks and report the number of trees in each stage-block.
- Example: A producer has one unit of grapefruit with 1,400 stage III trees, 800 stage II trees, and 800 stage I trees.
- The block must be reported as follows:

Block Number	Stage-Block	Stage	Number of Trees
1	1-I	I	800
1	1-II	II	800
1	1-III	III	1,400



# Stage-block Determination, Example

- For blocks in which **at least 75%** of the trees are the same stage, the producer **may** report the blocks as one stage-block.
- Example: A producer has one unit of grapefruit with 1,500 stage III trees, 250 stage II trees, and 250 stage I trees.
- The block may be reported as one stage-III block of 2,000 trees, or as follows:

Block Number	Stage-Block	Stage	Number of Trees
1	1-I	I	250
1	1-II	II	250
1	1-III	III	1,500





# Stage-block Determination, Underwriting Guide

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- Applicants for insurance certify the numbers and ages of trees to be insured by completing a Florida Fruit Grove Producer Pre-Acceptance Worksheet (shown in Exhibit 3 with instructions for completion.)
- The applicant identifies the blocks of trees in each unit and provides information about the numbers of trees and planting dates used to designate the stage-blocks that comprise each unit.
- The applicant also provides a Grove Identification Map (shown in Exhibit 3 with instructions for completion) that shows locations of the stage-blocks identified in the worksheet.
- Policyholders are not required to submit worksheets or maps in subsequent years unless changes occur which alter the numbers of trees and/or stage-block designations.



# Stage-block Determination, Underwriting Guide

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- Producers are not required to submit copies of their records to the insurance provider unless required by the loss adjuster at the time of claim settlement due to discovery of a discrepancy between the stage blocks that were established for the unit and the actual numbers and stages of trees in the unit.
- The following types of records are acceptable:
  - Planting records (grove management records);
  - Insurance provider recorded evidence, i.e., any documentation of tree ages used to establish insurance coverage for the trees or the crops produced by the trees; and
  - Florida Agricultural Statistics Service tree survey records. Instructions and a form for requesting such records are provided in Exhibit 4.



## Section 7. Annual Premium

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- Annual premium is determined by multiplying the amount of protection for the unit times the share, times the applicable premium rate, and times any applicable premium adjustment factors shown in the actuarial documents.
- The premium will be adjusted for applications submitted after the sales closing date.
- For crop year 2007, the crop year is only 11 months long.



## Section 8. Insured Crop

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- (b) In addition to the exclusions listed in section 8 of the Basic Provisions, we do not insure any trees that:
  - (2) Are non-grafted seedlings (grown from seed);
  - (5) Are toppled; or
  - (6) Were damaged before the beginning of the insurance period (If trees suffered damage the previous crop year, then insurance will not attach until the previous year's damage is determined, you submit a revised acreage report, and the trees are accepted by us).



## Section 8. Insured Crop

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- (c) In addition to the exclusions listed in section 8(b), we do not insure any citrus trees for losses due to infection by or exposure to ACC that:
  - (1) Were inspected by DPI before coverage for ACC attached and for which a specimen collected during the inspection was confirmed positive for ACC by a DPI pathologist; or
  - (2) Were planted during the period when replanting was prohibited by DPI or APHIS after the removal of trees infected by or exposed to ACC from the same acreage.



## Section 9. Insurance Period

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- (a)(2) For renewal policies if an acreage report (and a completed application if required) is received by us by the sales closing date, coverage begins on June 1 following the sales closing date for the crop year.
  - (i) An application is required if you elect a higher coverage level, add the Comprehensive Tree Value Endorsement or the Occurrence Loss Option, report an increased share, or report additional acreage of insurable trees such that the amount of protection will increase by more than 10 percent



## Section 9. Insurance Period

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(a)(2) *continued*

(ii) If insured damage occurs after the sales closing date but before insurance attaches for the crop year, insurance coverage will not attach to any additional amount of protection or optional coverage elected or reported by you for the crop year.

(a)(3) Upon set out for replacement trees. A revised acreage report is required to increase the amount of protection.

(b) The insurance period ends the earlier of

- **May 31** of the crop year; or
- Upon the insurance provider's determination of the total destruction of insured trees on the unit.



## Section 10. Causes of Loss

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- (a)(4) Flooding due to high groundwater levels, if allowed by the Special Provisions
  - SPOI: Allowed only in Miami-Dade County for 2007 CY
  - SPOI: Trees planted after June 1, 2006 in high-risk areas, must be on raised beds (18 inches) unless producer can show elevation is at least 6.5 feet for avocado or 5.5 feet for mango and carambola.
- (a)(5) In accordance with section 10(b), for citrus trees only, infection by or exposure to ACC resulting in a public order that identifies trees according to the limitations specified in the Special Provisions (Tropical trees are not insured for losses due to ACC); and
- (a)(6) Specified diseases, insects, and pathogens if allowed by the Special Provisions (*none allowed for 2007 CY*)





## Section 10. Causes of Loss

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- (b) With respect to ACC, if the citrus trees are located in a county where an ACC quarantine zone is:
  - (1) Not currently established, insurance coverage will be provided against ACC exposure or infection in accordance with section 10(a)(5); or
  - (2) Currently established, to be insured for losses caused by ACC, in accordance with section 10(a)(5), an acceptable, negative ACC Underwriting Certificate must be received by us within 30 days of the application for all new policies (unless otherwise stated in the Special Provisions) and within 30 days of the sales closing date for all carryover policies that did not provide ACC coverage the previous crop year, unless:
    - (i) For all carryover policies after the crop year in which an acceptable, negative ACC Underwriting Certificate was provided, no ACC certification is required in subsequent crop years unless:



## Section 10. Causes of Loss

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(b)(2)(i) *continued*:

(A) You elect a higher coverage level by the sales closing date deadline, in which case all land insured by this policy must be recertified;

(B) You report an increased share by the sales closing date deadline, then all sections of land in any unit subject to the increased share must be recertified; or

(C) You add acreage and/or trees and the addition will increase the amount of protection by more than 10 percent. The new ACC Underwriting Certificate is only required for the added acreage and/or trees. Previously reported acreage and/or trees that are not in the same section as the added acreage and/or trees do not require a new certification;



## Section 10. Causes of Loss

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(b)(2) *continued:*

(ii) The ACC Underwriting Certificate indicates that some of the citrus trees in any section are infected by or exposed to ACC and ACC coverage has not attached, then none of the citrus trees in which you have a share in that section can be insured for losses caused by ACC.

(iii) An acceptable, negative Underwriting Certificate is not received by us within 30 days after the sales closing date (unless otherwise stated in the Special Provisions). If this is the case and you have requested to increase the coverage level or share insured, add optional coverage, or insure added acreage and/or trees, you must revise your acreage report to reflect your choice of:



## Section 10. Causes of Loss

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### (b)(2)(iii) *continued*:

(A) Excluding ACC coverage from the sections of land for which such certification is required and obtain additional coverage (a higher coverage level, increased share, optional coverage, or coverage on added acreage and/or trees) for all other causes of loss; or

(B) Retaining ACC coverage and the coverage on the currently insured citrus trees for all other causes of loss at the current coverage level and share insured with no additional optional coverage. The added acreage and/or trees will be insured for all other causes of loss except losses caused by ACC.



## Section 10. Causes of Loss

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(c)(2) (Will not insure:) Any stage I citrus trees for freeze that do not meet the requirements given in the Special Provisions

- SPOI: Trees north of Interstate 4 must have irrigation that can deliver 10 gallons of water per hour directly to trunks of trees.
- Underwriting Guide: Adequate freeze-protection equipment is limited to irrigation systems, which are described as follows:
  - A functioning, single-zone irrigation system,
  - Capable of applying at least ten gallons of water per hour directly to the trunks of the trees.



## Section 10. Causes of Loss

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- Underwriting Guide: *Description of adequate freeze-protection equipment, continued:*
  - Micro-sprinkler emitters should be capable of being elevated or angled up in order to apply water to the entire trunk of any young trees.
  - The emitters should be capable of being placed within one yard of the trunk and positioned northwest of the tree.
  - Micro-Jet ® systems have color-coded emitters: black emitters can deliver from five to eight gallons-per-hour; blue emitters can deliver 10 gallons-per-hour; green emitters can deliver 15 gallons-per-hour; and red emitters can deliver 20 gallons-per-hour. Other brands of irrigation systems may not use the same color-coding system.



## Section 11. Duties in the Event of Damage or Loss

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(b) If damage cannot be determined until after the end of the insurance period, the claim must be submitted not later than **12 months** after the end of the insurance period

(c) The date of loss for ACC will be **the date when the specimen** that was confirmed positive by a DPI pathologist **was collected.**



## Section 12. Settlement of Claim

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- Step 1: Calculate the Unit Value and Underreport Factor
- Step 2:
  - If the cause of loss is ACC:
    1. Determine the actual number of insurable trees in each stage-block destroyed because of public order;
    2. Calculate the Amount of Insured Damage
    3. Multiply the Amount of Insured Damage times the Underreport Factor and Share





## 12. Settlement of Claim

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- If the cause of loss is not ACC:
  1. Calculate the Unit Deductible
  2. Calculate the Damage Value (for all causes of loss since the beginning of the crop year)
  3. Subtract the Unit Deductible from the Damage Value
  4. Multiply the difference (the result of 3) times the Underreport Factor and Share
  5. Subtract any previous indemnities for the current crop year to determine the indemnity due for the most recent cause of loss



## Section 12. Settlement of Claim

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- (b) Percent of damage for each stage-block in the stand of damaged trees is determined as follows:
  - (1) For damage occurring during the year of set out:
    - (i) Any tree with no live wood above the bud union will be considered destroyed; and
    - (ii) Any tree with live wood above the bud union will be considered undamaged.
  - (2) For damage occurring in any year following the year of set out, or for buckhorned or topworked trees, damage occurring either during the year the trees are topworked or buckhorned or any year thereafter:



## Section 12. Settlement of Claim

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### (b)(2) *Percent of damage, continued*

Trees are considered **DESTROYED** if:

- Dead
- No live wood above the bud union
- Toppled and rehabilitation is not possible or the tree is missing
- Damage within six inches of the trunk for all Stage I trees or within one foot of trunk for Stage II or III citrus trees
- Damage within six inches of the trunk for all Stage I and II trees or within one foot of the trunk for Stage III carambola trees
- Citrus trees removed because of ACC



## Section 12. Settlement of Claim

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*From (b) (2) Percent of damage, continued*

- Trees are considered **FULLY DAMAGED** if:
  - Buckhorned trees with no live wood above new growth points
  - Topworked trees with no live wood above graft unions
  - Toppled and rehabilitation is possible
  - Citrus and carambola trees: the diameter of at least one damaged limb is **at least three inches** at the point of damage
  - Avocado and mango trees: the diameter of at least one damaged limb is at least four inches at the point of damage or the diameter of the trunk is **at least four inches** at the point of damage.



## Section 12. Settlement of Claim

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*From (b) (2) Percent of damage, continued*

- Trees are considered **PARTIALLY DAMAGED** if:
  - Citrus and carambola trees: the diameter of at least one damaged limb is **at least one inch but less than three inches** at the point of damage
  - Avocado and mango trees: the diameter of at least one damaged limb is **at least two inches but less than four inches** at the point of damage



# Percent Damage Determination (from the LASH)

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- Four damage categories:
  - Undamaged (0%)
  - Partially Damaged (30%–75%, see Table B in LASH)
  - Fully Damaged (100%)
  - Destroyed (100%)
- Percent damage is determined based on representative samples from each stage-block that is within the stand of damaged trees (SDT)
- For each sample tree, appraise the two largest limbs on opposing sides of the tree. For example, the north/south limbs on the first sample tree, the east/west limbs on the second sample tree, and so forth



# Percent Damage Determination (from the LASH)

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- The limb with the greater amount of damage determines the damage category for the entire tree as follows:
  - Tree 1:
    - Limb 1 damage = 1" limb diameter
    - Limb 2 damage = 3" limb diameter
    - Tree Damage = 3" limb diameter = **Fully Damaged**
  - Tree 2:
    - Limb 1 damage = No damage
    - Limb 2 damage = 1" limb diameter
    - Tree Damage = 1" limb diameter = **Partially Damaged**



## Section 12. Settlement of Claim

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- (c) The applicable percent damage for the crop year will not exceed 100% for any stage-block or portion of a stage-block within a stand of damaged trees
- (e) Percent of damage will be determined not later than the earlier of:
  - (1) Our determination of the total destruction of insured trees on the unit; or
  - (2) May 31 of the crop year unless the percent of damage cannot be determined and in such cases it will be determined not later than twelve months after May 31 of the crop year in which the damage occurred.





## Section 14. Occurrence Loss Option (OLO)

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- Available with buy-up coverage for additional premium
- Eliminates Unit Deductible from indemnity calculation if a minimum damage threshold is met
- Election of the OLO does not change the indemnity calculation for ACC losses



## Section 14. OLO

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- OLO Indemnity Calculation for Non-ACC losses
  - 1: Calculate Unit Value and Underreport Factor
  - 2: Multiply the Unit Value by 5%
  - 3: Calculate the Damage Value
  - 4: Calculate the Amount of Insured Damage
  - If Amount of Insured Damage > 5% of Unit Value,  
Indemnity = Amount of Insured Damage x  
Underreport Factor x Share
  - If Amount of Insured Damage <= 5% of Unit Value,  
no indemnity is due



# Examples, Assumptions

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- Producer insures two crops (two units)

600 orange trees	3,000 grapefruit trees
200 Stage I	800 Stage I
200 Stage II	800 Stage II
200 Stage III	1,400 Stage III
- Elects 75% coverage level
- Has 100% share in crops
- Actuarial documents provide:
  - 3% premium rate on both crops
  - Tree Reference Prices for both crops:
    - \$18 (Stage I)
    - \$29 (Stage II)
    - \$35 (Stage III)



# Example

## Amount of Protection and Premium

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- Amount of Protection

Oranges = \$12,300

$$= [(200 \times \$18) + (200 \times \$29) + (200 \times \$35)] \times 75\%$$

Grapefruit = \$64,950

$$= [(800 \times \$18) + (800 \times \$29) + (1,400 \times \$35)] \times 75\%$$

- Premium Calculation

Oranges = \$369

$$= \$12,300 \times 100\% \text{ share} \times 3\% \text{ premium rate}$$

Grapefruit = \$1,949

$$= \$64,950 \times 100\% \text{ share} \times 3\% \text{ premium rate}$$



# Example

## Calculation of OLO Premium

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- Amount of Protection (same as base policy)
  - Oranges = \$12,300
  - Grapefruit = \$64,950
  - 6% premium rate for base policy with OLO
- Premium for Base Policy with OLO
  - Oranges = \$738
    - = \$12,300 x 100% share x 6% premium rate
  - Grapefruit = \$3,897
    - = \$64,950 x 100% share x 6% premium rate



## Example of ACC Claim

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- Removal of grapefruit due to ACC
  - 600 grapefruit trees in a Stage-III block
- Calculation
  - Unit Value = \$64,950 = Amount of Protection
  - Underreport Factor = 1.000
  - Damage Value = \$21,000
    - = 600 x \$35 x 100% damage
  - Amount of Insured Damage = \$15,750
    - = \$21,000 x 75% coverage level
  - Indemnity = **\$15,750**
    - = \$15,750 x 1.000 x 100% share



# Example of Non-ACC Claim

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- Freeze damage to grapefruit
  - 35% damage to a block of 800 stage II trees
  - 100% damage to a block of 800 stage I trees
  - No previous losses during crop year
- Calculation
  - Unit Value = \$64,950 = Amount of Protection
  - Underreport Factor = 1.000
  - Unit Deductible = \$21,650
    - =  $[(800 \times \$18) + (800 \times \$29) + (1,400 \times \$35)] \times 25\%$
  - Damage Value = \$22,520
    - =  $(800 \times \$29 \times 0.35) + (800 \times \$18 \times 1.000)$
  - Damage Value – Unit Deductible = \$870
    - =  $\$22,520 - \$21,650$
  - Indemnity = **\$870** =  $\$870 \times 1.000 \times 100\%$



# Example of Non-ACC Claim

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- Freeze damage to grapefruit
  - 35% damage to a block of 800 stage II trees
  - 100% damage to a block of 800 stage I trees
  - With prior ACC loss during crop year
- Calculation
  - Unit Value = \$64,950 = Amount of Protection
  - Underreport Factor = 1.000
  - Unit Deductible = \$21,650
    - =  $[(800 \times \$18) + (800 \times \$29) + (1,400 \times \$35)] \times 25\%$
  - Damage Value = \$43,520 = \$22,520 + \$21,000
  - Damage Value – Unit Deductible = \$21,870
    - = \$43,520 - \$21,650
  - Indemnity for most recent cause of loss = **\$6,120**
    - =  $(\$21,870 \times 1.000 \times 100\%) - \$15,750$





# Example of Claim with OLO

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- Freeze damage to grapefruit
  - 35% damage to a block of 800 stage II trees
  - 100% damage to a block of 800 stage I trees
- Calculation
  - Unit Value = \$64,950 = Amount of Protection
  - Underreport Factor = 1.000
  - 5% of Unit Value = \$3,248 = \$64,950 x 0.05
  - Damage Value = \$22,520
    - = (800 x \$29 x 0.35) +(800 x \$18 x 1.000)
  - Amount of Insured Damage = \$16,875 = \$22,500 x 75%
  - Amount of Insured Damage > 5% of Unit Value
    - (\$16,875 > \$3,248)
  - Indemnity = **\$16,875** = \$16,875 x 1.000 x 100% share



# Comprehensive Tree Value Endorsement (CTVE)

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- Section 1. In return for payment of additional premium, this endorsement is attached to and made part of your FFT Crop Provisions
- Section 2. Must be elected at the time of application or on or before the sales closing date for carryover policyholders; continues in effect until cancelled by the policyholder or insurance provider by giving written notice to the other party on or before the sales closing date
- Section 3. To be eligible for the CTVE, must have FFT policy in force and not have elected coverage under the CAT endorsement
- Section 4. All eligible insurable trees within the county of each crop and subtype the policyholder elected to cover under this endorsement will be insured



## CTVE Definitions, Section 5

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- **Block** – In lieu of the definition in section 1 of the Crop Provisions, a stand of trees of the same crop, and subtype if designated on the actuarial documents, on acreage sharing a common boundary with no discernable change in the planting pattern.
- **Citrus tree subtype** – Any of the following: (early/mid-season, late, Navel, and Temple oranges; white grapefruit; colored grapefruit; Murcotts (honey tangerines); tangelos; or tangerines.
- **CTV amount of insured damage** – The dollar amount determined by multiplying the CTV damage value by the coverage level.



## CTVE Definitions, Section 5

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- **CTV amount of protection** – The dollar amount (by unit) calculated by multiplying the number of insurable trees reported by you in each stage II- and stage III-block times the applicable maximum CTV reference price for the stage, adding these values, and then multiplying the result by the coverage level selected by you.



## CTVE Definitions, Section 5

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- **CTV damage value** – The dollar amount determined by multiplying the actual number of destroyed trees and the actual number of fully damaged trees in each stage II- and stage III-block in all the stands of damaged trees (SDT) identified as a result of the most recent cause of loss times the applicable CTV reference price, and then adding these values. The applicable CTV reference price will be the maximum CTV reference price for trees destroyed and the minimum CTV reference price for trees fully (100-percent) damaged.
- **CTV underreport factor (unit)** – The result of dividing the CTV amount of protection by the CTV unit value, rounded to three decimal places, not to exceed 1.000.



## CTVE Definitions, Section 5

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- **CTV unit deductible** – The dollar amount determined by multiplying the actual number of insurable trees in each stage II- and stage III-block in the unit on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times the maximum CTV reference price, adding these values, and then multiplying the result by the deductible.
- **CTV unit value** – The amount determined by multiplying the number of actual insurable trees in each stage II- and stage III-block in the unit, as determined by us, on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times the maximum CTV reference price for the stage, adding these values, and then multiplying the result by the coverage level selected by you.



## CTVE Definitions, Section 5

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- **Maximum CTV reference price** – The price per tree by subtype listed on the actuarial documents for CTV that is used in calculating the CTV unit value, the CTV amount of protection, and the portion of the CTV damage value for destroyed trees for this endorsement.
- **Minimum CTV reference price** – The price per tree by subtype listed on the actuarial documents for CTV that is used in calculating the portion of the CTV damage value for fully (100-percent) damaged trees for this endorsement.



# Comprehensive Tree Value Endorsement (CTVE)

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- Section 6. Coverage level elected under section 3 of the FFT Crop Provisions applies to the CTVE.
- Section 7. Acreage must be reported by stage-block for each citrus tree subtype, as shown on the actuarial documents.
- Section 8. The following crops are not eligible for the CTVE: carambola, lemon, lime, and mango trees.





# CTVE, Summary of Insurable Crops and Subtypes

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- Avocado trees
- Grapefruit trees
  - White grapefruit
  - Colored grapefruit
- Orange trees
  - Early/mid-season varieties
  - Navel
  - Late varieties, including Valencia
  - Temple
- Other citrus trees
  - Murcott (Honey tangerine)
  - Tangerine
  - Tangelo



# Comprehensive Tree Value Endorsement (CTVE)

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- Section 9. Trees in Stage I blocks are not insurable under the CTVE
- Section 10. Only trees in Stage II and Stage III blocks considered fully (100%) damaged or destroyed are eligible for an indemnity under the CTVE



## CTVE, Section 11

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- For all trees considered **destroyed**, to receive the full indemnity under this endorsement:
  - An equivalent number of trees must be planted within three calendar years of the date of the removal or destruction
  - The trees planted do not have to be the same crop as the destroyed trees but must be grown to produce fruit intended to be sold for human consumption
  - The trees must be planted in accordance with good farming practices and in an area within the state of Florida considered to be suitable for the production of the specific fruit crop
  - Policyholder will receive 50% of the indemnity within 30 days after claim approval and the remaining 50% upon verification by insurance provider that replant requirements have been met.



## CTVE, Section 12

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- CTVE claim will only be payable if an indemnity is paid on the same unit under the FFT policy.
- If no indemnity is due under the FFT policy, then no indemnity will be due under this endorsement.
- The total amount of ACC and non-ACC indemnities on a unit during the crop year is limited to the lesser of the CTV Amount of Protection times the share or the CTV Unit Value times the share.



# CTVE Example

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- Producer insures two crops (two units)
  - 400 early orange trees:
    - 200 Stage II                      200 Stage III
  - 2,200 white grapefruit trees:
    - 800 Stage II                      1400 Stage III
- Assume
  - 75% coverage level (25% deductible)
  - 100% share in crops
  - 3% CTVE premium rate on both crops



# CTVE Example

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- CTV Reference Prices

CTV Maximum Reference Prices (early orange)

\$20 (Stage II)

\$38 (Stage III)

CTV Maximum Reference Prices (white grapefruit)

\$19 (Stage II)

\$28 (Stage III)

CTV Minimum Reference Prices (early orange)

\$10 (Stage II)

\$20 (Stage III)

CTV Minimum Reference Prices (white grapefruit)

\$12 (Stage II)

\$20 (Stage III)



# Example CTVE Amount of Protection and Premium

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- CTV Amount of Protection

Early Orange = \$8,700

=  $[(200 \times \$20) + (200 \times \$38)] \times 75\%$

White Grapefruit = \$40,800

=  $[(800 \times \$19) + (1,400 \times \$28)] \times 75\%$

- Premium Calculation

Early Orange = \$261

=  $\$8,700 \times 100\% \text{ share} \times 3\% \text{ premium rate}$

White Grapefruit = \$1,224

=  $\$40,800 \times 100\% \text{ share} \times 3\% \text{ premium rate}$



# Example

## CTVE Indemnity Calculation

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- Removal of white grapefruit due to ACC
  - 600 white grapefruit trees in a Stage-III block are removed
  - Trees are considered destroyed; use Maximum Reference Price to calculate CTV Damage Value; replant required
- Calculations

CTV Unit Value = \$49,500 = CTV Amount of Protection  
=  $[(200 \times \$20) + (200 \times \$38) + (800 \times \$19) + (1,400 \times \$28)] \times 75\%$   
CTV Underreport Factor = 1.000  
CTV Damage Value = \$16,800 =  $600 \times \$28$   
CTV Amount of Insured Damage = \$12,600 =  $\$16,800 \times 75\%$   
**Indemnity = \$12,600** =  $\$12,600 \times 1.000 \times 100\%$  share  
Indemnity due **at time of claim** = **\$6,300** =  $\$12,600 \times 50\%$   
Indemnity due **upon verification of replant** = **\$6,300**





# Example, Non-ACC Loss CTVE Indemnity Calculation

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- Freeze damage to white grapefruit trees
  - 200 stage II and 200 stage III were destroyed
  - 200 stage II and 200 stage III were fully damaged
  - Use **Maximum** CTV Reference Price to calculate CTV Damage Value for **destroyed** trees; replant required
  - Use **Minimum** CTV Reference Price to calculate CTV Damage Value for **fully damaged trees**; replant not required



# Example, Non-ACC Loss CTVE Indemnity Calculation

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- Calculations

CTV Underreport Factor = 1.00

CTV Unit Deductible = \$13,600

=  $[(1,400 \times \$28) + (800 \times \$19)] \times 25\%$  deductible

CTV Damage Value for destroyed trees = \$9,400

=  $(200 \times \$19) + (200 \times \$28)$

CTV Damage Value for fully damaged trees = \$6,400

=  $(200 \times \$12) + (200 \times \$20)$



# Example, Non-ACC Loss CTVE Indemnity Calculation

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*Continued*

CTV Damage Value for destroyed trees = \$9,400  
= (200 x \$19) + (200 x \$28)

CTV Damage Value for fully damaged trees = \$6,400  
= (200 x \$12) + (200 x \$20)

Total CTV Damage Value = \$15,800  
= \$9,400 + \$6,400

CTV Damage Value - CTV Unit Deductible = \$2,200  
= \$15,800 - \$13,600

**Total Indemnity = \$2,200 = \$2,200 x 1.000 x 100%**



# Example, Non-ACC Loss CTVE Indemnity Calculation

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- *Continued*

Percent of Damage Value due to destroyed trees

$$= 59\% = \$9,400 \div \$15,800$$

Percent of Damage Value due to fully damaged trees

$$= 41\% = \$6,400 \div \$15,800$$

**Indemnity due at time of claim** = 100% indemnity  
for fully damaged trees + 50% indemnity for destroyed  
trees = **\$1,551**

$$= (\$2,200 \times 41\%) + (\$2,200 \times 59\% \times 50\%)$$

**Indemnity due upon verification of replant** = **\$649**

$$= \$2,200 \times 59\% \times 50\%$$



# Example, Indemnity Calculation CTVE with OLO

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- Freeze Damage to White Grapefruit
  - 200 Stage II and 200 Stage III were destroyed
  - 200 Stage II and 200 Stage III were fully damaged
- Calculations
  - Underreport Factor = 1.000
  - CTV Damage Value for destroyed trees = \$9,400
  - = (200 x \$28) + (200 x \$19)
  - CTV Amount of Insured Damage destroyed trees
  - = \$7,050 = \$9,400 x 75% coverage level
  - Indemnity for destroyed trees = \$7,050**
  - = \$7,050 x 1.000 x 100% share



# Example, Indemnity Calculation CTVE with OLO

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- *Continued*

CTV Damage Value for fully damaged trees = \$6,400  
=  $(200 \times \$12) + (200 \times \$20)$

CTV Amount of Insured Damage for fully damaged trees  
= \$4,800 =  $\$6,400 \times 75\%$

**Indemnity for fully damaged trees = \$4,800**  
=  $\$4,800 \times 1.000 \times 100\%$  share

**Total indemnity = \$11,850 =  $\$7,050 + \$4,800$**

**Indemnity due at time of claim = \$8,325**  
=  $(\$7,050 \times 50\%) + \$4,800$

**Indemnity due after replant = \$3,525**  
=  $(\$7,050 \times 50\%)$